

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/695,033		10/27/2003	Shahla Satary-Ravabakhsh	RAR492.01	5732	
29762	7590	05/31/2006		EXAM	EXAMINER	
RICHARD ATTORNEY		- '	RUNNING, RACHEL A			
8497 N. MII		•	ART UNIT	PAPER NUMBER		
SUITE 101			3732			
FRESNO, C	CA 93720	)	DATE MAILED: 05/31/2006			

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/695,033	SATARY-RAVABAKHSH, SHAHLA				
Office Action Summary	Examiner	Art Unit				
	Rachel A. Running	3732				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 17 M	arch 2006.					
	action is non-final.					
·—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) Claim(s) <u>1-3,5-7,9-11 and 17-22</u> is/are pending	in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-3,5-7,9-11 and 17-22</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9)⊠ The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>17 March 2006</u> is/are: a) accepted or b)⊠ objected to by the Examiner.						
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	∋ 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Do 5) Notice of Informal F 6) Other:					

Art Unit: 3732

#### **DETAILED ACTION**

### Specification

1. The disclosure is objected to because of the following informalities: the amendment to the specification contains new matter.

Appropriate correction is required.

2. The amendment filed March 17, 2006 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The entire paragraph added and requested to be inserted on page 17, line 11, constitutes as new matter, examples including: the dental floss or a portion of the dental floss being made from a material that is dissolvable, the materials being polyglycolic acid and polyglactic acid wherein they are braided and providing varying thicknesses with the larger sizes being polyligmented and is suitable for being dyed. The doxycycline hyclate is solidifying as soon as it is exposed to saliva. Dying the thickened area of the dental floss a separate color than the rest of the dental strand. A pair of segment areas which can be reduced in thickness and are suitable for easily breaking off the strand portion from the remaining dental floss, therefore the strand portion with the doxycycline hyclate can be broken off and left inside the patient's periodontal pocket for the medicine to slowly release over time, such as seven days, while the strand portion

Art Unit: 3732

dissolves in the periodontal pocket. The strand portion and the medicine product stay under the patient's gums for an extended period of time, with the absorbability of the strand portion prolonging the effect of the doxycycline hyclate medicine. The method of placing the medicinal member on the strand portion in the periodontal pocket and then separating the strand portion from the dental floss strand to dispose the strand portion with the doxycycline hyclate medicine in the periodontal pocket. The patient then allows the medicine to solidify so that it may release the medicine over time to allow the strand portion to dissolve in the periodontal pocket.

Applicant is required to cancel the new matter in the reply to this Office Action.

## **Drawings**

3. The drawings are objected to because they contain new matter, the drawing containing Figure 4 is not approved and therefore will not be entered. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency.

Art Unit: 3732

Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Claim Rejections - 35 USC § 112

- 4. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 5. Claims 1-3, 5-7, 9-11, and 17-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention:
- 6. In claim 1, the medicinal members configured for retaining and selectively placing the medicine product into said one or more the periodontal pockets, constitutes as new matter
- 7. In claim 2, the dental floss strand being made from a dissolvable material configured to dissolve in the periodontal pockets and the dental floss strand being

Art Unit: 3732

configured to dispose one of the medicinal members in the periodontal pockets, constitutes as new matter.

- 8. In claim 3, the dental floss strand comprising a pair of segment areas around each of the medicinal members, the segment areas configured to separate the medicinal member from the dental floss strand and dispose the medicinal member in the periodontal pocket, constitutes as new matter.
- 9. In claim 7, a strand portion of the dental floss strand being dissolvable material configured to dissolve in a periodontal pocket, the dental floss configured to dispose one of the medicinal member in one of the periodontal pockets, placing the doxycycline hyclate in one or more periodontal pockets, and a pair of segment areas around each of the medicinal members, the segment areas configured to separate the medicinal member from the dental floss strand and dispose the medicinal member in the periodontal pocket, constitutes as new matter.
- 10. In claim 11, a strand portion of the dental floss strand being dissolvable material configured to dissolve in a periodontal pocket, a strand portion having a segment area on each end configured to separate the strand portion from the dental floss, placing the medicinal member in one of the periodontal pockets, separating the strand portion from the dental floss to dispose the strand portion in the periodontal pocket, and allowing doxycycline hyclate to solidify in the periodontal pocket and the strand portion dissolving in the periodontal pocket, constitutes as new matter.
- 11. In claims 19-21, the dental floss strand being made from a material selected from the group comprising polyglycolic acid and polyglactic acid, constitutes as new matter.

Art Unit: 3732

12. In claim 22, wherein one or more strand portions are thickened areas of the dental floss, constitutes as new matter.

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Keller. Keller discloses a dental floss for treatment of periodontitis that includes an elongated dental floss strand (27), one or more medicinal members (29) having a medicine product that is configured for retaining and placing the medicine product into one or more periodontal pockets see Figure 5 (column 2, lines 42-50). The medicine product is an antimicrobial agent (column 3, lines 22-25). The antimicrobial agent is a tetracycline medicine (column 3, lines 25-30). One or more of the medicinal members comprises a spongy member (29) see Figure 5 (column 3, lines 10-20). Regarding claims 7, 12, 18, and 20, one or more medicinal members is an absorbent strip (25) (column 5, lines 5-20). Keller does not disclose the antimicrobial agent being doxycycline hyclate gel. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the tetracycline medicine be doxycycline hyclate gel, since it has

Art Unit: 3732

been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Claims 2, 3, 5-7, 9-11, 17-22 are rejected under 35 U.S.C. 103(a) as being 3. unpatentable over Keller in view of Warren (U.S. Patent No. 3,754,332) and in view of Applicant's specification. Keller discloses the claimed invention as rejected in claim 1 above, except for the floss being made from a dissolvable material, wherein the material is polyglycolic acid and polyglactic acid, the dental floss strand comprises a pair of segment areas around each of the medicinal member that allow the dental floss strand to dispose the medicinal member in a periodontal pocket. Warren teaches a flossing member that has segment areas around each of the medicinal members that allows the dental floss strand to dispose the medicinal member in a periodontal pocket, which then dissolves. (column 1, lines 29-35). The applicant's specification teaches that polyglycolic acid and polyglactic acid commonly known as Dexon and Vicryl are well known dissolvable materials used in the human body (page 7, lines 4-6). It would have been obvious to one having ordinary skill in the art to make the floss of Keller from polyglycolic acid or polyglactic acid as taught by the applicant's specification and further have the medicinal member comprise a pair of segment areas to allow the dental strand dispose the medicinal member into a periodontal pocket as taught by Warren in order to allow the medicine to dissolve over a period of time.

# Response to Arguments

4. Applicant's arguments with respect to the Keller reference have been considered but are most in view of the new ground(s) of rejection.

#### Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachel A. Running whose telephone number is (571) 272-1917. The examiner can normally be reached on Monday-Friday 8:00 am - 4:30 pm.

Art Unit: 3732

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on (571) 272-4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rachel A. Running

PATRICIA BIANCO PRIMARY EXAMINER